

2. Statement re Surrender of Original United States Letters Patent No. 5,642,985.
3. Proposed Supplemental Reissue Declaration.
4. Form PTO-1449, and a copy of listed issued parent U.S. Patent No. RE38,040.
5. Declaration of Frans A.E. Breugelmans (pp. 1-23), separately bound with Exhibits 1-14 thereto.
6. A floppy disc containing the proposed Form PTO-850 and Interference Initial Memorandum (Appendix C) in Microsoft® Word XP®.
7. Petition for Extension of Time.

IN THE CLAIMS:

Cancel claims 10, 11, 13-17, and 20, without prejudice.

Amend claims 18, 19, and 23 to read as shown below:

Claim 18. A fan stage of a ducted fan gas turbine engine that is rotatable about an axis of rotation and defines a downstream direction along the axis of rotation, comprising:

a fan casing that defines an inner duct wall having a fan rotor region;

a hub disposed concentrically relative to the fan casing;

a fan rotor that includes multiple swept fan blades, the swept fan blades being spaced apart around the hub, each of the multiple swept fan blades having:

a tip profile that corresponds to the inner duct wall of the fan casing;

a leading edge that defines a variable sweep angle in a direction perpendicular to the axis of rotation, the leading edge including:

an inner region adjacent the hub, the inner region defining a forward sweep angle;

an intermediate region between the inner region and the fan casing, the intermediate region defining a rearward sweep angle; and
an outer region between the intermediate region and the fan casing, the outer region being translated forward relative to a leading edge with the same sweep angle as an outward boundary of the intermediate region.

Claim 19. The fan stage according to claim 18, wherein the leading edge at a boundary between the intermediate region and the inner region extends further upstream along the axis of rotation than the leading edge of the inner region.

Claim 23. A fan stage of a ducted fan gas turbine engine that is rotatable about an axis of rotation and defines a downstream direction along the axis of rotation, comprising:
a fan casing that defines an inner duct wall having a fan rotor region;
a hub disposed concentrically relative to the fan casing;
a fan rotor that includes multiple swept fan blades, the swept fan blades being spaced apart around the hub and being capable of rotating at speeds providing supersonic working medium gas velocities over the blades to cause a shock in the gas adjacent the inner duct wall,
each of the multiple swept fan blades having:

a tip profile that corresponds to the inner duct wall of the fan casing;
a leading edge that defines a variable sweep angle in a direction perpendicular to the axis of rotation, the leading edge including:
an inner region adjacent the hub, the inner region defining a forward sweep angle;
an intermediate region between the inner region and the fan casing, the intermediate region defining a rearward sweep angle; and